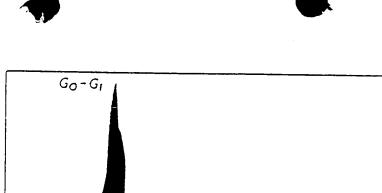


FIGURE 1
DIAGRAMATIC REPRESENTATION OF THE NORMAL MAMMALIAN CELL CYCLI



G<sub>2</sub>-M

Fig. 2a

S

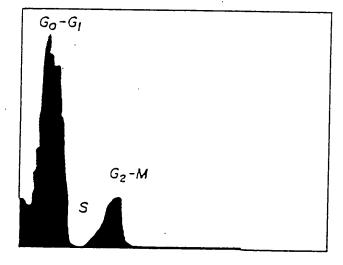


Fig. 2b

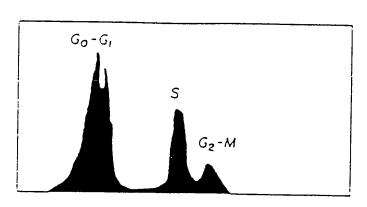


Fig. 3a

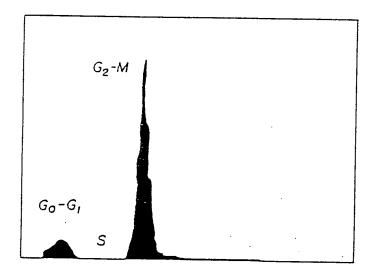


Fig. 3b

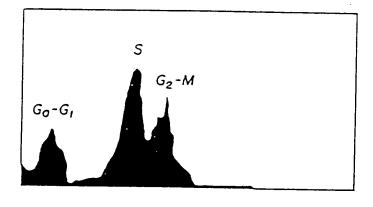


Fig. 3c



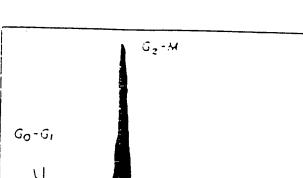


Fig. 4a

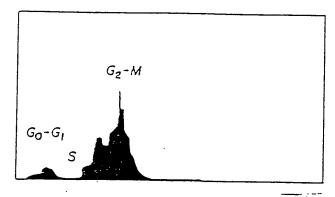


Fig. 4b

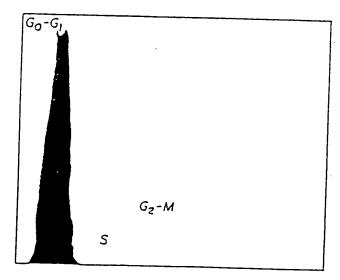


Fig. 4c

TABLE 1. The Distribution of Sex and Age of 100 Patients with A.L.F.

| TOTAL | S             |     | ∞   | 12  | 23  | 23  | 21       | 2   | 100   |  |
|-------|---------------|-----|-----|-----|-----|-----|----------|-----|-------|--|
| M     |               |     | w   | . 2 | 7   | 7   | <b>—</b> |     | 25    |  |
| F     | 2             | ₩   | en  | 10  | 16  | 21  | 20       | 7   | 75    |  |
| AGE   | - <del></del> | 11- | 21- | 31- | 41- | 51- | -19      | 71- | TOTAL |  |
|       |               |     |     |     |     |     |          |     |       |  |

|          | Par | Patient | Dosage (cc/q4 | Dosage (colq4d) (minimum<br>dose in cc that triggers blastogenesis) |
|----------|-----|---------|---------------|---|
|          | No. | %       | Range         | Mean  |
| Normal   | 47  | 47      | 0.1           | 0.1   |
| Build up | 37  | 37      | 0.15-1.0      | 0.3   |
| Dilution | 16  | 16      | 0.01-         | 0.05  |

| >12    | 20           |
|--------|--------------|
| 111    | 7            |
| 10     | 4            |
| 6      | 9            |
| ∞      | 10           |
| 7      | 9            |
| 9      | 7            |
| w      | 7            |
| 4      | 11           |
| 3      | 14           |
| 2      | 8            |
| Months | No. Patients |

Average therapy time:  $7.4 \pm 3.8$  months

Range: 2-16 months

| >12            | 14           |  |
|----------------|--------------|--|
| 11             | 7            |  |
| 10             | 4            |  |
| 6              | 9            |  |
| <b>&amp;</b>   | 10           |  |
| 7              | 11           |  |
| 9 .            | 8            |  |
| Ŋ              | 9            |  |
| 4              | 15           |  |
| က              | 13           |  |
| 7              | 8            |  |
| Dosage<br>(cc) | No. Patients |  |

Average therapy dose: 6.44 ± 3.79 cc

Range: 2-25 cc

TABLE 5.

### Scale of Clinical Symptoms and Signs of The Patient After ALF Treatment (Severity)

| Summfoms                   | Improvement | nt   | No C | No Charge | Worsening | ing | Total Patients |
|----------------------------|-------------|------|------|-----------|-----------|-----|----------------|
| e injecoms                 | No.         | %    | No.  | %         | No.       | %   |                |
| Hypersensitive<br>Reaction | 63          | 63   | . 33 | 33        | 1         | 1   | 100            |
| Recrurrent<br>Infection    | 38          | 57   | 29   | 43        | 0         | 0   | 19             |
| Fatigue .                  | 09          | . 89 | 27   | 31        | 1         | 1   | 88             |
| Lack of<br>Concentration   | 43          | 54   | 36   | 46        | 0         | 0   | 79             |
| Arthritis                  | 19          | 44   | 23   | 54        | 1         | 2   | 43             |
| G.I. Upset                 | 29          | 40   | 43   | 09        | 0         | 0   | 72             |
| Headache                   | 28          | 44   | 33   | 53        | 7         | 3   | 64             |
| Depression                 | 42          | 58   | 30   | 42        | 0         | 0   | 72             |

TABLE 6.

Scale of Clinical Symptoms and Signs of The Patient After ALF Treatment (Frequency)

| Symptoms                                      | Improvement | ınt  | No C | No Charge | Worsening | ing | Total Patients |
|---|-------------|------|------|-----------|-----------|-----|----------------|
| e line la | No.         | %    | No.  | . %       | No.       | %   |                |
| Hypersensitive<br>Reaction                    | 38          | 38   | 62   | 62        | 0         | 0   | 100            |
| Recurrent<br>Infection                        | 26          | 39   | 41   | 61        | 0         | 0   | <i>L</i> 9     |
| Fatigue                                       | 38          | 43 . | 20   | 57        | 0         | 0   | 88             |
| Lack of<br>Concentration                      | 20          | 25   | 59   | 75        | 0         | 0   | 79             |
| Arthritis                                     | 11          | 26   | 32   | 74        | 0         | 0   | 43             |
| G.I. Upset                                    | 21          | 29   | 51   | 69        | 0         | 0   | 72             |
| Headache                                      | 19          | 30   | . 45 | 70        | 0         | 0   | 64             |
| Depression                                    | 30          | 42   | 42   | 58        | 0         | 0   | 72             |
|   |             |      |      |           |           | 1   |                |

|        | TOTAL<br>LYMPHOCYTES | $T_{ii}$ | Ţ           | $T_{s}$ | T./T.   | B,  |             |
|--------|----------------------|----------|-------------|---------|---------|---|-------------|
|        |                      |          |             |         |         |   |             |
| BEFORE | 2112±632             | 1624±457 | 930±45      | 439±58  | 2.3+0.8 | 188+102   | <del></del> |
|        |                      |          |             |         | 1       | 7   |             |
| AFTER  | $2232\pm678$ •       | 1634±544 | 1027±297 ·· | 478+189 | 1.3+04  | 1714120   |             |
|        |                      |          |             |         |         | 071711  |             |
|        |                      |          |             | ,       |         | Manual Street or the Contract of the Contract | _           |

n = 92

\*\* p

p<0.01

رامار

منذ

# T Lymphocyte Subsets of 92 Patients After ALF Treatment

| TOTAL  | TOTAL    | · E        |    | _   | ç     |       | ć        |
|--------|----------|------------|----|-----|-------|-------|----------|
| IAII I | 10011153 | = <b>T</b> |    |     | 7     |       | <b>3</b> |
| NO.    | %        | NO.        | %  | NO. | 60    | NO.   | %        |
| 52     | 57       | 41         | 46 | 53  | 58    | 55    | 09       |
| 40     | 43       | 51         | 54 | 39  | 42    | 37    | 40       |
| <0.05  | 05       | >0.05      | 5  |     | <0.05 | <0.01 | 01       |

| C         | Ċ |
|-----------|---|
| <u>r-</u> | ٦ |
|           | 7 |
| <b>~</b>  |   |
| ~         | 4 |
|           | 4 |

## CMI Results with ALFIEffect

CMI Scores (Number and Size,  $\bar{x}\pm$  SD)

| d               | <0.001    |
|-----------------|-----------|
| AFTER ALF       | 9.28±7.25 |
| BEFORE ALF      | 5.46±5.81 |
| NO.<br>PATIENTS | 78        |

### CMI Positive Score (Number and Size) After ALF

| ď               | <0.001   |           |          |
|-----------------|----------|-----------|----------|
| %               | 74       | 12        | 14       |
| N0.<br>PATIENTS | - 85     | 6         | 11       |
|                 | INCREASE | NO CHANGE | DECREASE |

# The Relationship Between CMI and Clinical Symptom and Sign Improvement

|                             | IMPROVEMENT<br>NO. % | MENT<br>% | NO IMPROVEMENT NO. % | /EMENT | ď       |
|-----------------------------|----------------------|-----------|----------------------|--------|---------|
| CMI INCREASE                | 56                   | 72        | 2                    | 3      | <.0.001 |
| CMI NO CHANGE<br>& DECREASE | 14                   | 18        | 9                    | ∞      |         |

- PAIN AND IRRITATION IN THROAT, BURNING IN THE EYES
- .. NAUSEA
- 3. CHEST TIGHTNESS AND HEART PALPITATION
- 4. FLU-LIKE SYMPTOMS, HEADACHE, FATIGUE, CHILL
- 5. INCREASE IN FOOD AND ODOR SENSITIVITY

Table 11

### 190 Patients with ALF

|        | No.       | %       |
|--------|-----------|---------|
| Female | 131       | 69      |
| Male   | 59        | 31      |
| Age:   | 2-76 year | ars old |
| Mean:  | 46.8 ye   | ars old |

Table 12

### **ALF Dosage**

|          | Patient |     | Dosage (cc/q4d) (minimum dose in cc that triggers blastogenesis) |        |
|----------|---------|-----|--|--------|
|          | No.     | %   | Range  |        |
| Normal   | 88      | 46  | 0.1  | (1:10) |
| Build up | 84      | 44. | 0.15-1.0   | (1:10) |
| Dilution | 18      | 9   | 0.1 (1:20, 1   | •      |

The distribution of period of ALF therapy

Table 13

| Month | No. Patients | %    |
|-------|--------------|------|
| 1-3   | 27           | 14.2 |
| 4-6   | 19           | 10.0 |
| 7-9   | 25           | 13.2 |
| 10-12 | 20           | 10.5 |
| 13-15 | 11           | 5.8  |
| 16-18 | 21           | 11.1 |
| 19-21 | 21           | 11.1 |
| 22-24 | 7            | 3.7  |
| 24-26 | 14           | 7.4  |
| 27-29 | 11           | 5.8  |
| 30-32 | 5            | 2.6  |
| 33-36 | 9            | 4.7  |

Average: 14.6 months (Range 1-37 months)

Table 14

### The Distribution of dosage of ALF

| Dosage (cc) | No. Patient | %    |
|-------------|-------------|------|
| 1-5         | 45          | 23.7 |
| 6-10        | 59          | 31.1 |
| 11-20       | 66          | 34.7 |
| 21-30       | 19          | 10   |
| 31-40       | 1           | 0.5  |
| Total       | 190         | 100  |

Average: 11.27 (cc)

Range: 1-38 (cc)

Table 15

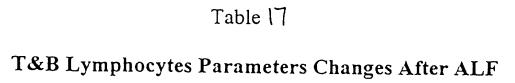
Scale of Clinical Symptoms and Signs of The C.S. Patient After ALF Treatment (Severity)

| Symptoms       | Impr<br>No. | Improvement<br>No. % | No C | No Changes<br>No. % | Wol<br>No. | Worsening<br>No. % | Total<br>Patients |
|----------------|-------------|----------------------|------|---------------------|------------|--------------------|-------------------|
| Hypersensitive |             |                      |      |                     | 2          |                    |                   |
| Reaction       | 51          | 26.7                 | 33   | 36.7                | 9          | 6.7                | 06                |
| Recurrent      |             |                      |      |                     | -          |                    |                   |
| Infection      | 33          | 8.05                 | 27   | 41.5                | 2          | 7.7                | 65                |
| Fatigue        | 58          | 71.6                 | 17   | 20.99               | 9          | 7.4                | 8                 |
| Lack of        |             |                      |      |                     |            |                    |                   |
| Concentration  | 42          | 57.5                 | 29   | 39.7                | 7          | 2.7                | 73                |
| Arthritis      | 70          | 44.4                 | 22   | 48.9                | 3          | 6.7                | 45                |
| G.I.Upset      | 32          | 44.4                 | 33   | 45.8                | 7          | 6.7                | 72                |
| Headache       | 30          | 40.5                 | 38   | 51.4                | 9          | 8.1                | 74                |
| Depression     | 44          | 63.8                 | 22   | 31.9                | 3          | 4.3                | 69                |
|                |             |                      |      |                     |            |                    |                   |

Table 16

Scale of Clinical Symptoms and Signs of The Patient After ALF Treatment (frequency)

| Symptoms       | Impro<br>No. | Improvement<br>No. % | No Cl<br>No. | No Changes<br>No. % | Wors<br>No. | Worsening<br>No. % | Total<br>Patients |
|----------------|--------------|----------------------|--------------|---------------------|-------------|--------------------|-------------------|
| Hypersensitive |              | -                    |              |                     |             |                    |                   |
| Reaction       | 28           | 36.4                 | 46           | 59.7                | m           | 3.9                | 77                |
| Recurrent      |              |                      |              |                     |             |                    |                   |
| Infection      | 27           | 46.6                 | 27           | 46.6                | 4           | 6.9                | 58                |
| Fatigue        | 36           | 47.4                 | 37           | 48.7                | 3           | 3.9                | 9/                |
| Lack of        |              |                      |              |                     |             |                    |                   |
| Concentration  | 23           | 33.8                 | 43           | 63.2                | 2           | 2.9                | 89                |
| Arthritis      | 13           | 32.5                 | 24           | 0.09                | 3           | 7.5                | 40                |
| G.I.Upset      | 23           | 37.1                 | 35           | 56.5                | 4           | 6.5                | 62                |
| Headache       | 24           | 38.1                 | 34           | 54.0                | 5           | 7.9                | 63                |
| Depression     | 34           | 54.8                 | . 92         | 41.9                | 2           | 3.2                | 62                |
|                |              |                      |              |                     |             |                    |                   |



|                | (N) | Before (mean+SE) | After        |
|----------------|-----|------------------|--------------|
| WBC            | 25  | 4180±404.1**     | 4828±1164.6  |
| Lymphs         | 34  | 1350 ±225.1**    | 1573.2±448.2 |
| T11            | 32  | 989.4±198.1**    | 1182.6±331.2 |
| T4             | 30  | 518.2±107.2**    | 689.5 ±200.1 |
| Ratio of T4/T8 | 46  | 3.62± 0.99**     | 2.71± 1.04   |
| T8             | 52  | 248.6±63.3**     | 354.3 ±124.9 |
| B4             | 35  | 54.8±17.0**      | 121.3±78.7   |

<sup>\*\*--</sup>P<0.01 (Change compared with before ALF therapy)

T&B Lymphocytes parameters improvement after ALF

Table 18

|                | Patients No. | Improved No. | (%)   |
|----------------|--------------|--------------|-------|
| WBC            | 25           | 18           | 72%   |
| Lymphs         | 34           | 25           | 74%   |
| T11            | 32           | 21           | 66%   |
| T4             | 30           | 24           | 80%   |
| Ratio of T4/T8 | 46           | 37           | 80.4% |
| Т8             | 52           | 40           | 76.9% |
| B4             | 35           | 27           | 77%   |

Table 19

### CMI Improvements of 93 Patients with ALF

|           | Total No. of Antigen Responses |
|-----------|--------------------------------|
| Increase  | 247*                           |
| Decrease  | 171                            |
| No change | 233                            |
| Total     | $\overline{651}$               |

<sup>\*</sup> P<0.001 compared with decrease



Table 20

### Diagnosis

|                      | <u>No.</u> | <u>%</u> |
|----------------------|------------|----------|
| Chemical sensitivity | 127        | 67       |
| Food Sensitivity     | 106        | 56       |
| Inhalant Sensitivity | 84         | 44       |
| EMF Sensitivity      | 9          | 5        |

Table 21

### Diagnosis

|               | <u>No.</u> | %    |
|---------------|------------|------|
| N.S           | 104        | 54.7 |
| C.V           | 53         | 27.9 |
| G.I           | 59         | 31.1 |
| G.U           | 15         | 7.9  |
| M.S           | 107        | 56.3 |
| EYE           | 4          | 2.1  |
| Respiratory   | 87         | 45.8 |
| Skin          | 22         | 11.6 |
| Endocrine     | 24         | 12.6 |
| Immune        |            |      |
| dysregulation | 99         | 52.1 |
| Chronic       |            |      |
| infectioin    | 42         | 22.1 |
| Implant       | 7          | 3.7  |
| Parasite      | 3          | 1.6  |
| Carcinoma     | 3          | 1.6  |
| Candidosis    | 8          | 4.2  |
| HIV positive  | 1          | 0.5  |

### TABLE 22

### 50 Year Old White Female HIV Positive

0.1cc every 4 doses

| CMI                  | before -1  | CMI         | after 3                              |
|----------------------|--|-------------|--------------------------------------|
| WBC                  | - 3,500  |             | 10,000                               |
| $\mathbf{T}_{11}$    | 964  |             | 1359                                 |
| T11%                 | 54   |             | 73%                                  |
| $T_4$                | 149  |             | 750                                  |
| $T_{4\%}$            | 8%   |             | 40%                                  |
| $T_8$                | 464  |             | 875                                  |
| T <sub>8%</sub>      | 26   |             | 47%                                  |
| $T_4/T_8$            | .17  |             | 1.62                                 |
| В                    | 36   | ·           | 93                                   |
| B%                   | 2  |             | 5%                                   |
| ne<br>Stoma<br>Non h | tigue,<br>europathy<br>ch Pain<br>ealing toe<br>n for 2 yrs. | -<br>-<br>- | ergy<br>gone<br>gone<br>gone<br>gone |

Took ALF for 5 months, then stopped All Sx exacerbated for 3 weeks. Restarted ALF and Sx disappeared

Before ALF After ALF Ä.

Table 23

PATIENTS WITH CANCER & ALF

|               | 46 y F<br>Breast<br>Cancer | 59 y F<br>Breast<br>Cancer | 84 y F<br>Leukemia | 67 y F<br>para-<br>thyroid<br>tumor | 42 y P<br>Breast<br>Cancer | 63 y P<br>Left Breast<br>Mastectomy | 23 y M<br>Osteo-<br>genic<br>Sarcoma |
|---------------|----------------------------|----------------------------|--------------------|-------------------------------------|----------------------------|-------------------------------------|--------------------------------------|
|               | 3/1/95<br>9/3/96           | 6/1/95<br>7/21/95          | 10/20/94<br>2/7/95 | 3/25/96<br>1/9/97                   | 10/10/94<br>5/30/95        | 10/31/96<br>1/10/97                 | 4/8/96<br>9/24/96                    |
|               | 0.1cc                      |                            | 0.1cc              | 1:10³-1:10<br>0.1cc                 | 0.1cc                      | 0.1cc                               | 0.1cc                                |
|               | 90 doses                   | 40                         | 09                 | 130                                 | 90                         | 70                                  | 50                                   |
| Tetanus       | ह्य<br>स्थ                 | ख<br>ख                     | य<br>स             | 8<br>30<br>30                       | ख<br>स्व                   | <b>≈</b> 0                          | B                                    |
| Diphtheria    | 4                          | 0                          |                    | 9                                   | 4                          | 0                                   |                                      |
| Streptococcus | 0                          | 0                          |                    | 0                                   | 0                          | 0                                   |                                      |
| Tuberculin    | o                          | 0                          |                    | 0                                   | 0                          | 0                                   |                                      |
| Control       | 0                          | 0                          |                    | 0                                   | 0                          | 0                                   |                                      |
| Candida       | 0                          | 0                          |                    | 0                                   | 0                          | 0                                   |                                      |
| Trichophyson  | 0                          | 0                          |                    | . 0                                 | 0                          | 0                                   |                                      |
| Proteus       |                            | 4                          |                    | 0                                   | 4                          | 0                                   |                                      |

|             | 46 Y F<br>Breast<br>Cancer | हा का अप<br>60 का<br>हा का का | 59 VER<br>Breakt | u<br>Li | # 1 0 | 59.VET CALL CONTROL CALLES CONTROL CALLES THE CALLES THE THREET CALLES THE THREET THREET THREET THREET THREET THREET | Para-<br>thyroid<br>tumor | , e | 42 y F<br>Breast<br>Cancer | ή μ<br>τ τη | 63 Y F<br>Laft<br>Breast | 23 Y K<br>Osteor<br>genic |
|-------------|----------------------------|-------------------------------|------------------|---------|-------|--|---------------------------|-----|----------------------------|-------------|--------------------------|---------------------------|
| WBC         | æ                          | я<br>6900                     | <b>23</b> 1      | 4       | ect.  | A<br>223001  | æ                         | æ   | æ                          | <b>«</b>    | <b>4</b>                 | B A                       |
|             | 5100                       | 43001                         |                  | i       |       |  | 7000                      |     | 4700                       | 4500        | 6700                     |                           |
|             |                            | 2277<br>1720                  |                  |         |       |  |                           |     |                            | 1431        |                          |                           |
| Lymphocytes | 2550                       | 1848                          |                  |         |       | 15387†   | 2590                      |     | 1833                       | 1305        | 2412                     |                           |
|             |                            | 33<br>60                      |                  |         |       |  |                           |     |                            | 27          |                          |                           |
| Ly&         | 20                         | 44                            |                  |         |       | 69   | 37                        |     | 39                         | 29          | 36                       |                           |
| ıl H        | 1734                       | 1867<br>10664<br>1478         |                  |         |       | 4923† .  | 1868                      |     | 1448                       | 1188        | 1787                     | )                         |
|             |                            | 82<br>62                      |                  |         |       |  |                           |     |                            | 83          |                          |                           |
| Tile        | 88                         | 80                            |                  |         |       | 32   | 76                        |     | 79                         | 99          | 12                       |                           |
| E           | :                          | 1002<br>378‡                  |                  |         |       |  | -                         |     |                            | 587         |                          | )                         |
| -           | 944                        | 832                           |                  | }       |       | 2308†  | 1606                      |     | 733                        | 469         | 724                      |                           |
| Ē           | ;                          | 44<br>224                     |                  |         |       |  |                           |     |                            | 7           |                          |                           |
| S.          | 33                         | 45                            |                  |         | j     | 154  | 621                       |     | 40                         | 36          | 30                       |                           |
| e           |                            | 433                           |                  |         |       |  |                           |     |                            | 329         |                          | Į                         |
|             | 612                        | 591                           |                  | . }     |       | 26161  | 544                       |     | 495                        | 235         | 669                      |                           |
| ,<br>1      |                            | 19<br>28                      |                  |         |       |  |                           |     |                            | 23          |                          | 1                         |
| T, A        | 24                         | 32                            |                  |         |       | 17   | 21                        |     | 27                         | 18          | 29                       |                           |
|             |                            |                               |                  |         |       |  |                           |     |                            |             |                          |                           |

| 1,/1,                            | 15                    | 2.32<br>0.794<br>1.41 | ريس الساء | 때 (1) 10 10 10 10 10 10 10 10 10 10 10 10 10 | 리           | 1.5 | 1.8  | 1.03 |
|----------------------------------|-----------------------|-----------------------|---|--|-------------|-----|------|------|
| , de                             | 332                   | 205<br>120<br>92      |   | 18481  | 104         | 155 | 172  | 241  |
| B, B                             | 13                    | ev t- rev             |   | 12   | 7           | 6   | 12 8 | 10   |
| S: Sever<br>F: Frequ             | Severity<br>Frequency |                       |   | ·  |             |     |      |      |
| Allergic                         | <b>ω ο</b> ∗          | <b>⋖</b> .→→          |   |  | <b>4</b> 00 |     |      |      |
| Headaches                        | 07 fz.                | 00                    |   |  | 00          |     |      |      |
| Recurrent<br>Infection           | <b>6</b> 2) (in       | <b>→ →</b>            |   |  | 00          |     |      |      |
| Patigue                          | <b>ω</b> μ            | <b>→ →</b>            |   |  | 00          |     |      |      |
| Difficulty<br>Concen-<br>tration | os er                 | → 0                   |   |  | 00          |     |      | ·    |
| Arthritis                        | 87 (                  | <b>→</b>              |   |  | 00          |     |      |      |
| GI Upset                         | (2) Ent               | → →                   |   |  | 00          |     |      |      |
| Depression                       | S) E4                 | <b>→</b> →            |   |  | 00          |     |      |      |
|                                  |                       |                       |   |  | 1           |     |      |      |